

Present Value of Difference in Income
John Curtis

Prepared at the Request of

William E. Moore, Jr., Esq.
Gray, et al.
PO Box 2636
Gastonia, NC 28503

Prepared by

Gary R. Albrecht, Ph.D.
Albrecht Economics, Inc.
1817 Georgia Ave.
Winston-Salem, NC 27104

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Summary:

In this report I calculated the present value of Mr. Curtis's expected earnings assuming his employment at Fatz Café had continued and the present value of his expected earnings given his current situation. The present value of the difference between the two amounts is **\$952,585**. (Due to rounding to the nearest dollar, the sums shown may not add to the components shown.)

Information Relied Upon:

I have reviewed information concerning Mr. Curtis which includes:

A questionnaire completed by Mr. Curtis; and,
Tax Returns for 2007 and 2013;

I have also reviewed:

Interest rates from the Board of Governors of the Federal Reserve System;
Bureau of Labor Statistics, Consumer Price index; and,
Bureau of Labor Statistics, Consumer Expenditures data;

In addition, I have spoken with Mr. Curtis.

Present Value of Difference in Earnings:

Mr. Curtis's annual wages at Fatz Café, according to his 2012 and 2013 W-2s, were \$82,108 and \$74,331 respectively. These two amounts were averaged and put in current purchasing power dollars. Health insurance value of \$6,105 is added to the wages along with the employer's contribution to benefits of 7.65 percent of wages. Expenses of \$4,536 are subtracted from wages to arrive at the annual earnings amounts in the column *Expected Earnings (No Future Inflation)* in Table 1. The entry at age 50 is less as it is for .13 of a year.

The sum of *Expected Earnings (No Future Inflation)* in Table 1 is \$1,417,090. Using an inflation rate of 3.0% I calculated the series *Expected Earnings (Future Inflation)* in Table 2. The *Expected Earnings (Future Inflation)* is \$2,107,529. The amount required to provide the stream was calculated using the same real interest rate, .70 percent, in the no-inflation and inflation situations; the U.S. Supreme Court suggests the use of real rates (see Jones & Laughlin Steel Corp. v. Pfeifer). The rate of inflation does not affect the present value required for compensation given the real rate (see Albrecht and Krueger,

The Earnings Analyst and Albrecht and Moorhouse, *Journal of Forensic Economics*), which fact is recognized by the U.S. Supreme Court.

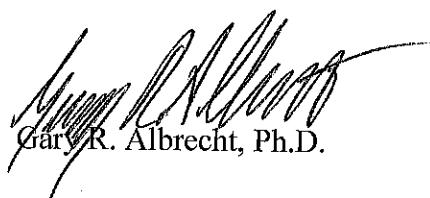
The *Present Value of Expected Earnings* is \$1,354,858 in both the inflation and no-inflation situations, see Tables 1 and 2. This amount may be referred to as the present value of the amount Mr. Curtis would have been expected to earn had he remained at Fatz Café.

Using Mr. Curtis's current earnings his annual earnings are expected to be \$26,642, see Table 6. This amount consists of earnings at Merle Norman, a part-time bartending job, and a restaurant serving job. The present value of the earnings is \$402,274, see Tables 6 and 7.

Conclusion:

Mr. Curtis discontinued working at Fatz Café. Mr. Curtis currently has other employment. Mr. Curtis is not expected to earn as much currently as he would have earned at Fatz Café. The present value of the difference is reported in Table 11. The *Present Value of Difference in Total Expected Earnings* is \$952,585.

The calculations may change if additional information becomes available. Please do not hesitate to contact me if any questions arise.



Gary R. Albrecht, Ph.D.

(Table 1)

Present Value of Expected Earnings if Employment at Fatz Café had Continued (No Future Inflation)

Age	Expected Earnings (No Future Inflation)	Real Discount Factor	Present Value of Expected Earnings	Cumulative Present Value of Expected Earnings
50	11,421	1.00000	11,421	11,421
51	87,854	1.00000	87,854	99,275
52	87,854	1.00000	87,854	187,130
	187,130		187,130	
53	87,854	0.99305	87,244	87,244
54	87,854	0.98615	86,637	173,881
55	87,854	0.97929	86,035	259,916
56	87,854	0.97248	85,437	345,352
57	87,854	0.96572	84,843	430,195
58	87,854	0.95901	84,253	514,449
59	87,854	0.95234	83,667	598,116
60	87,854	0.94572	83,086	681,202
61	87,854	0.93915	82,508	763,710
62	87,854	0.93262	81,935	845,645
63	87,854	0.92614	81,365	927,010
64	87,854	0.91970	80,800	1,007,810
65	87,854	0.91331	80,238	1,088,048
66	87,854	0.90696	79,680	1,167,728
	1,229,960		1,167,728	
			1,417,090	
			1,354,858	

(Table 2)

Present Value of Expected Earnings if Employment at Fatz Café had Continued (Future Inflation)

Age	Expected Earnings (No Future Inflation)	Nominal Discount Factor	Present Value of Expected Earnings	Cumulative Present Value of Expected Earnings
50	11,421	1.00000	11,421	11,421
51	87,854	1.00000	87,854	99,275
52	87,854	1.00000	87,854	187,130
	187,130		187,130	
53	90,490	0.96412	87,244	87,244
54	93,205	0.92954	86,637	173,881
55	96,001	0.89619	86,035	259,916
56	98,881	0.86404	85,437	345,352
57	101,847	0.83304	84,843	430,195
58	104,903	0.80316	84,253	514,449
59	108,050	0.77434	83,667	598,116
60	111,291	0.74656	83,086	681,202
61	114,630	0.71978	82,508	763,710
62	118,069	0.69396	81,935	845,645
63	121,611	0.66906	81,365	927,010
64	125,259	0.64506	80,800	1,007,810
65	129,017	0.62192	80,238	1,088,048
66	132,888	0.59961	79,680	1,167,728
	1,920,400		1,167,728	
	2,107,529		1,354,858	

(Table 3)

Disposition of Present Value Amount (No Inflation)

Age	Beginning Balance	Interest Earned	Income Loss	Ending Balance
50	1,354,858	0	11,421	1,343,437
51	1,343,437	0	87,854	1,255,582
52	1,255,582	0	87,854	1,167,728
53	1,167,728	8,174	87,854	1,088,048
54	1,088,048	7,616	87,854	1,007,810
55	1,007,810	7,055	87,854	927,010
56	927,010	6,489	87,854	845,645
57	845,645	5,920	87,854	763,710
58	763,710	5,346	87,854	681,202
59	681,202	4,768	87,854	598,116
60	598,116	4,187	87,854	514,449
61	514,449	3,601	87,854	430,195
62	430,195	3,011	87,854	345,352
63	345,352	2,417	87,854	259,916
64	259,916	1,819	87,854	173,881
65	173,881	1,217	87,854	87,244
66	87,244	611	87,854	0

(Table 4)

Disposition of Present Value Amount (Inflation)

Age	Beginning Balance	Interest Earned	Income Loss	Ending Balance
50	1,354,858	0	11,421	1,343,437
51	1,343,437	0	87,854	1,255,582
52	1,255,582	0	87,854	1,167,728
53	1,167,728	43,451	90,490	1,120,689
54	1,120,689	41,701	93,205	1,069,186
55	1,069,186	39,784	96,001	1,012,969
56	1,012,969	37,693	98,881	951,781
57	951,781	35,416	101,847	885,350
58	885,350	32,944	104,903	813,391
59	813,391	30,266	108,050	735,607
60	735,607	27,372	111,291	651,688
61	651,688	24,249	114,630	561,307
62	561,307	20,886	118,069	464,125
63	464,125	17,270	121,611	359,784
64	359,784	13,388	125,259	247,912
65	247,912	9,225	129,017	128,120
66	128,120	4,767	132,888	0

(Table 5)

Summary

Historical Expected Earnings (Back Pay) if Employment at Fatz Café had Continued (Age 50.87 to Age 53)	187,130
Present Value of Future Expected Earnings (Front Pay) if Employment at Fatz Café had Continued (Age 53 to Age 67)	1,167,728
Present Value of Total Expected Earnings if Employment at Fatz Café had Continued (Age 50.87 to Age 67)	1,354,858

(Table 6)

Present Value of Expected Earnings Given Current Situation (No Future Inflation)

Age	Expected Earnings (No Future Inflation)	Real Discount Factor	Present Value of Expected Earnings	Cumulative Present Value of Expected Earnings
50	0	1.00000	0	0
51	21,523	1.00000	21,523	21,523
52	26,642	1.00000	26,642	48,164
	48,164		48,164	
53	26,642	0.99305	26,456	26,456
54	26,642	0.98615	26,272	52,729
55	26,642	0.97929	26,090	78,818
56	26,642	0.97248	25,908	104,727
57	26,642	0.96572	25,728	130,455
58	26,642	0.95901	25,549	156,005
59	26,642	0.95234	25,372	181,377
60	26,642	0.94572	25,195	206,572
61	26,642	0.93915	25,020	231,592
62	26,642	0.93262	24,846	256,439
63	26,642	0.92614	24,674	281,113
64	26,642	0.91970	24,502	305,615
65	26,642	0.91331	24,332	329,947
66	26,642	0.90696	24,163	354,109
	372,981		354,109	

421,145

402,274

(Table 7)

Present Value of Expected Earnings Given Current Situation (Future Inflation)

Age	Expected Earnings (No Future Inflation)	Nominal Discount Factor	Present Value of Expected Earnings	Cumulative Present Value of Expected Earnings
50	0	1.00000	0	0
51	21,523	1.00000	21,523	21,523
52	<u>26,642</u>	<u>1.00000</u>	<u>26,642</u>	<u>48,164</u>
	<u>48,164</u>		<u>48,164</u>	
53	27,441	0.96412	26,456	26,456
54	28,264	0.92954	26,272	52,729
55	29,112	0.89619	26,090	78,818
56	29,985	0.86404	25,908	104,727
57	30,885	0.83304	25,728	130,455
58	31,811	0.80316	25,549	156,005
59	32,766	0.77434	25,372	181,377
60	33,749	0.74656	25,195	206,572
61	34,761	0.71978	25,020	231,592
62	35,804	0.69396	24,846	256,439
63	36,878	0.66906	24,674	281,113
64	37,984	0.64506	24,502	305,615
65	39,124	0.62192	24,332	329,947
66	<u>40,298</u>	<u>0.59961</u>	<u>24,163</u>	<u>354,109</u>
	<u>565,190</u>		<u>354,109</u>	
	613,354		402,274	

(Table 8)

Disposition of Present Value Amount (No Inflation)

Age	Beginning Balance	Interest Earned	Income Loss	Ending Balance
50	402,274	0	0	402,274
51	402,274	0	21,523	380,751
52	380,751	0	26,642	354,109
53	354,109	2,479	26,642	329,947
54	329,947	2,310	26,642	305,615
55	305,615	2,139	26,642	281,113
56	281,113	1,968	26,642	256,439
57	256,439	1,795	26,642	231,592
58	231,592	1,621	26,642	206,572
59	206,572	1,446	26,642	181,377
60	181,377	1,270	26,642	156,005
61	156,005	1,092	26,642	130,455
62	130,455	913	26,642	104,727
63	104,727	733	26,642	78,818
64	78,818	552	26,642	52,729
65	52,729	369	26,642	26,456
66	26,456	185	26,642	0

(Table 9)

Disposition of Present Value Amount (Inflation)

Age	Beginning Balance	Interest Earned	Income Loss	Ending Balance
50	402,274	0	0	402,274
51	402,274	0	21,523	380,751
52	380,751	0	26,642	354,109
53	354,109	13,176	27,441	339,845
54	339,845	12,646	28,264	324,227
55	324,227	12,064	29,112	307,179
56	307,179	11,430	29,985	288,624
57	288,624	10,740	30,885	268,479
58	268,479	9,990	31,811	246,658
59	246,658	9,178	32,766	223,070
60	223,070	8,300	33,749	197,622
61	197,622	7,354	34,761	170,214
62	170,214	6,334	35,804	140,744
63	140,744	5,237	36,878	109,103
64	109,103	4,060	37,984	75,179
65	75,179	2,797	39,124	38,852
66	38,852	1,446	40,298	0

Summary Given Current Situation

Historical Earnings (Back Pay) Given Current Situation (Age 50.87 to Age 53)	48,164
Present Value of Future Expected Earnings (Front Pay) Given Current Situation (Age 53 to Age 67)	<u>354,109</u>
Present Value of Total Expected Earnings Given Current Situation (Age 50.87 to Age 67)	402,274

(Table 11)

Summary

Historical Expected Earnings (Back Pay) if Employment at Fatz Café had Continued (Age 50.87 to Age 53)	187,130
Historical Earnings (Back Pay) Given Current Situation (Age 50.87 to Age 53)	<u>48,164</u>
Difference in Historical Earnings (Back Pay)	138,966
Present Value of Future Expected Earnings (Front Pay) if Employment at Fatz Café had Continued (Age 53 to Age 67)	1,167,728
Present Value of Future Expected Earnings (Front Pay) Given Current Situation (Age 53 to Age 67)	<u>354,109</u>
Difference in Present Value of Future Expected Earnings (Front Pay)	813,619
Present Value of Difference in Total Expected Earnings	<u>952,585</u>